Application No. 10/562,802 DO NOT ENTER: /B.J./ Docket No.: 66969-0003

Amendment dated After Final Office Action of December 21, 2010

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

 (Currently Amended) A process for joining components for torque transmission in a vehicle, the components being made from hardenable steel and having a material thickness, by producing a weld seam without secondary heating, comprising:

providing hardenable steel components having a material thickness and a carbon content of over 0.2%;

positioning a welding electrode with respect to a weld line;

applying a voltage;

supplying a plasma gas;

forming an arc; and

melting the steel in the vicinity of the weld line over the entire material thickness, wherein the energy per unit length introduced by the welding process is in the range from 234 J/mm to 3360 J/mm, wherein the hardenable steel has a material thickness in the range from approximately 2.0 mm to 10.0 mm, and wherein a weld seam is produced, at the weld line, without secondary heating and without a filler

3. - 13. (Canceled)

 (Previously Presented) A process according to claim 2, wherein the weld seam is of singlelayer design.

15. (Canceled)

(Previously Presented) A process according to claim 2, wherein the weld seam is a butt seam
or a fillet seam.

2

Amendment dated

After Final Office Action of December 21, 2010

17. (Canceled)

18. (Previously Presented) A process according to claim 2, wherein during the welding

operation, a plasma jet is moved in the welding direction at a welding speed of at least 0.2 m/min.

19. (Canceled)

20. (Previously Presented) A process according to claim 2, wherein the weld seam is produced

by radial circumferential welding.

21. (Previously Presented) A join between at least two components for torque transmission

made from hardenable steel, wherein the join comprises at least one weld seam produced by a

process according to claim 2.

22. (Previously Presented) A join according to claim 21, wherein at least one of the components

is a hollow shaft with a wall thickness in the range from approximately 2.0 mm to 10.0 mm.

23. (Previously Presented) A join according to claim 18, wherein at least one of the components

is a hollow shaft with a wall thickness in the range from approximately 2.0 mm to 10.0 mm.

24. (Previously Presented) A join according to claim 21, wherein the join and adjoining

subregions of the components are essentially free of cracks.

25. (Previously Presented) A join according to claim 22, wherein the join and adjoining

subregions of the components are essentially free of cracks.

26. (Previously Presented) A join according to claim 21, comprising a ductility in the range

from about 250 HV to 650 HV.

3

Application No. 10/562,802 Docket No.: 66969-0003

Amendment dated

After Final Office Action of December 21, 2010

(Previously Presented) A vehicle comprising an engine with a drive system, wherein the
drive system includes components for torque transmission, and at least two components have been

welded to one another by a process according to claim 2.

28. (Previously Presented) A vehicle comprising an engine with a drive system, wherein the

drive system includes components for torque transmission, and at least two components have been

welded to one another by a process according to claim 18.

29. (Previously Presented) A vehicle comprising at least two components made from hardenable

steel and connected by a joint comprising a weld seam produced by a process according to claim 2.

30. (Previously Presented) A vehicle comprising at least two components made from hardenable

steel and connected by a joint comprising a weld seam produced by a process according to claim 18.

4